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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,525	09/29/2005	Thure Etzold	833.1003	7835
23280 7590 09/27/2007 DAVIDSON, DAVIDSON & KAPPEL, LLC 485 SEVENTH AVENUE, 14TH FLOOR NEW YORK, NY 10018			EXAMINER LEROUX, ETIENNE PIERRE	
			ART UNIT 2161	PAPER NUMBER
			MAIL DATE 09/27/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/509,525	Applicant(s) ETZOLD ET AL.	
	Examiner Etienne P. LeRoux	Art Unit 2161	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-11 and 39-47 is/are rejected.
- 7) ☒ Claim(s) 2 and 12-38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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***Claim Status***

Claims 1-47 are pending.

***Specification Objection***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Claim 1 recites “performing a query on said set equivalent to the initial query.” The specification does not provide adequate support for determining a query which is “equivalent” to an initial query.

***Claim Objections***

Claims 2, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1 and 44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites “performing a query on said set equivalent to the initial query.” The is insufficient antecedent basis for “the initial query.”

Claim 1 recites in the preamble “evaluating a query involving one or more relational databases” and further recites in the preamble “said query relating to at least two tables of said relational database” and recites in the body of the claim “including the tables referred to in the query” and furthermore recites in the body of the claim “performing a query on said set equivalent to the initial query, wherein said step of performing said query on said set comprises performing consecutive partial queries.” The claim is indefinite because “query” is recited five (5) times and is difficult to ascertain how many queries applicant is claiming. Claim 44 includes language similar to claim 1.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, 6, 9, 10, 11, 44, 45, 46 and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 5,287,493 (Jacopi), hereafter Jacopi, as best examiner is able to ascertain.

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Claims 1, 3, 4, 6, 9, 10, 11, 44, 45, 46, 47

Jacopi discloses:

determining a set of tables, including the tables referred to in the query, wherein each of the tables in said set is linked to at least one other table, such that, in a graphical representation of the database wherein the tables are represented as nodes and links between the tables are represented as lines between the nodes, they form a connected graph connecting nodes corresponding to the tables referred to in the query [Figs 1 and 2],

performing a query on said set equivalent to the initial query, wherein said step of performing said query on said set comprises performing consecutive partial queries, wherein a result of a previous query is used as input for a later query, and combining the results of said partial queries to obtain a result to the initial query [col 4, lines 30-45, allowing the user to select the group after being prompted with meaningful information about the groups, user enters additional join statements]

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacopi as applied to claim 1 above, and further in view of US Pat No 5,724,575 (Hoover et al), hereafter Hoover, as best examiner is able to ascertain.

Claim 5:

Jacopi discloses the elements of the claimed invention as noted above but does not disclose wherein said result of a previous query comprises the value of a foreign key of a table involved in a later query and wherein said value of said foreign key is used as input for said later query. Hoover discloses searching by means of a foreign key [col 23, lines 25-30]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jacopi to include above limitation for the purpose of searching a Sybase relational database. [col 23, lines 20-25].

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacopi as applied to claim 1 above, and further in view of US Pat No 5,386,557 (Boykin et al), hereafter Boykin., as best examiner is able to ascertain.

Claim 7, 8:

Jacopi discloses the elements of the claimed invention as noted above but does not disclose wherein after each partial query a redundancy check or a check for consistency, or both, is carried out in the respective result and a result of said partial query purged of redundancies and/or inconsistencies is stored. Boykin discloses a consistency check [col 1, lines 30-35]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to

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modify Jacopi to include the above limitation for the purpose of checking changes to a database [col 1, lines 30-35].

Claims 39, 40, 41, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacopi as applied to claim 1 above, and further in view of US Pat No 5,799,309 (Srinivasan), hereafter Srinivasan, as best examiner is able to ascertain.

Claim 39, 40, 41, 42, 43

Jacopi discloses the elements of the claimed invention as noted above but does not disclose wherein a result is represented in an object oriented representation. Srinivasan discloses an object oriented representation [abstract]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jacopi to include the above limitation for the purpose of allowing access from an object oriented database to a relational database [col 1, lines 40-45].

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne P. LeRoux whose telephone number is (571) 272-4022. The examiner can normally be reached on Monday through Friday, 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on (571) 272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Etienne LeRoux

9/24/2007



ETIENNE LEROUX  
PRIMARY EXAMINER